Urban Forest Management Plan

DRAFT 5-year Implementation Strategy

Vision: Seattle's urban forest is a thriving and sustainable mix of tree species and ages that creates a contiguous and healthy ecosystem that is valued and cared for by the City and all of its citizens as an essential environmental, economic, and community asset.

Introduction

Seattle's trees provide a myriad of environment, social, and economic benefits significantly enhancing the livability and health of the city. Trees absorb global warming pollution, provide wildlife habitat, clean our air and water, lessen the impacts of storms by intercepting and absorbing rainwater, increase property values, calm traffic, reduce crime, and improve the walkability of our neighborhoods. Increasing our tree canopy cover will increase the value of these benefits to both current and future generations.

In 2007, the City of Seattle set the bold goal of achieving 30 percent tree canopy cover in 30 years to increase the environmental, social, and economic benefits trees bring to Seattle residents. The Seattle Urban Forest Management Plan (UFMP) was developed as a comprehensive strategy for increasing Seattle's tree canopy cover to meet the 30 percent target. The UFMP lays out goals and a broad range of actions to be implemented over time to preserve, maintain, and plant trees as well as restore the public forested areas remaining in the city.

In spring 2009, a high resolution satellite study was conducted to map canopy cover across Seattle in an effort to better understand the distribution of the urban forest canopy and recent trends in canopy gain and loss. The satellite study revealed that after decades of tree loss, canopy cover increased slightly between 2002 and 2007 from 22.5 to 22.9 percent. While this is encouraging, the findings also show that we need to more than double the pace of canopy gain in order to meet the 30 percent goal by 2037. Results of the canopy study have helped identify neighborhoods where tree cover is low and areas where there is significant potential for tree planting. This information will be used to inform urban forest outreach messages and program priorities.

An implementation strategy with a shorter time horizon than the 30-year UFMP is needed to guide our actions. Increasing knowledge about the distribution of the urban forest and current opportunities and challenges must be considered in order to effectively prioritize actions. Therefore, we have created this document to serve as an Implementation Strategy for the UFMP establishing priorities for the next five years.

Seattle Urban Forest Management Plan Overview

The Urban Forest Management Plan (UFMP) is organized around a widely used framework for urban forest planning, a process which is very different than planning for and managing trees in natural settings or timberland forests. Urban forests grow in a challenging environment as impervious surfaces, competition for space, compacted soils, residents' desires for views, invasive plants, and pests all create pressures on our trees. Therefore, more active management is required to foster sustainable urban forests. Urban environments also create opportunities. Residents are closely connected to the trees in

their yards, along their streets, and in their parks. This connection can be leveraged into direct action and support for tree preservation, planting, and restoration. Reflecting the scope of these challenges and opportunities, the three domains of the urban forest planning model are:

Tree Resource - the trees themselves, as individuals or in forest stands
Management Framework – the policies, plans, regulations, and resources brought to bear on the tree resource
Community Framework – the ways residents are engaged with the urban forest

Specific goals in each domain of the framework have been defined in the UFMP to help plan actions to meet the goal of 30 percent canopy cover (Table 1: UFMP Framework and Goals.) The UFMP includes a list of recommended actions over the short-, mid- and long-term to achieve these goals. As the UFMP is a comprehensive long- term strategic plan, the recommended actions are not prioritized based on current policy priorities and resource constraints. These priorities and constraints will change over time; therefore, this shorter term 5-year implementation strategy is needed.

Table 1: UFMP Framework and Goals

Tree Resource	Management Framework	Community Framework
Understand the characteristics and complexity of Seattle's urban forest Maintain trees to promote health and longevity Maximize canopy cover and optimize age and species diversity Maximize the ecological and environmental benefits of the urban forest	Facilitate interdepartmental communication and cooperation to provide decision-makers the information they need to support the UFMP Develop and implement resource management tools Preserve and protect existing trees, and encourage new tree planting throughout the city by improving management of trees on private property Model good stewardship in City practices	Enhance public awareness of the urban forest as a community resource Engage the community in active stewardship of the urban forest Promote citizen-government-business partnerships

Goals by Land Use

The Urban Forest Management Plan assesses the opportunities and challenges for preserving and enhancing the urban forest in nine land use categories and lays out recommended canopy cover goals and actions for each. Breaking down the city by land use helps in planning for the unique settings and uses in each land use category. Planning for tree preservation and planting in an industrial setting is very different than in a residential setting. The current and goal canopy cover for each of the land management units is presented in Table 2. Please note that right-of-way (ROW) was considered within each of the relevant land management units as the adjacent land use affects the opportunities and challenges for tree preservation and planting but is also reported separately at the bottom of the table as a land use the City has a significant amount of influence over.

Table 2: Tree Canopy Cover Goals by Land Use Category

Land Use Category	UFMP Goal Tree Cover
Single- Family	33%
Multi-Family	20%
Commercial/Mixed Use	15%
Downtown Seattle	12%
Industrial	10%
Institutional	20%
Parks: Developed Sites	25%
Parks: Natural Areas	80%
Citywide	**30%**
Transportation Corridors/Street ROW	24%

Broader Regulatory, Policy and Planning Context

The urban forest program operates within a broader context of state and municipal regulations, policies, and plans. These regulations, policies and plans create opportunities for furthering urban forest goals and establish other requirements and priorities within which urban forest goals must be achieved. For example, the drainage code requires use of green stormwater infrastructure, which includes trees, to the extent feasible during certain types of development and the City has an Executive Order calling for the planting of two trees for every tree removed from certain City property. Additionally, the City's Comprehensive Plan identifies a range of urban development policy goals the City must balance as it grows.

Current Urban Forest Program

The City is implementing a wide range of actions to care for and expand the urban forest ranging from nurturing young trees to incenting private tree planting and recruiting volunteers to help restore forested lands. Current programs and related opportunities and challenges are included in Table 3. Each year the Urban Forest Interdepartmental Team creates a work plan based on the actions identified in the UFMP. These plans summarize the actions the City has prioritized for implementation in a given year. Progress in implementing work plans is evaluated annually.

Table 3: Current Urban Forest Programs, Opportunities, and Challenges

Strategy	Current Actions	Description	Opportunities & Challenges
Stewardship of City trees	Routine care (pruning, integrated pest management, watering etc)	Parks, SDOT, SCL, Seattle Center, Woodland Park Zoo all care for trees including 90,000 trees in developed parks, 38,000 street trees, over 500,000 trees in natural areas, and trees at facilities such as Seattle Center, Woodland Park Zoo, fire and police stations, and other buildings. The City is also responsible for maintaining electrical line clearance for safety and reliability. Pruning cycle is a commonly used indicator for the level of regular maintenance. City pruning cycles range from 12 (SDOT) to 18 years (Parks). Seattle Center and Woodland Park Zoo have resources to maintain trees as needed, rather than at designated intervals. Caring for mature trees promotes health and longevity and helps prevent potential future hazards. Mature trees contribute greater canopy and environmental and social benefits.	Funding: The recommended pruning cycle is 3 years for young trees and 7-9 years for mature trees. Due to limited resources, the cycle currently followed prioritizes potential hazard mitigation, young tree establishment, and storm damage cleanup with limited resources remaining for holistic health-focused care. Stewardship Monitoring: Pruning cycle is not the best measure of the effectiveness of the tree care program nor is it the best indicator of tree maintenance as pruning for health and pruning to remove a potential hazard are very different and other tree care elements (pest management, watering etc) are not reflected by a pruning indicator. Improved indicators could better reflect the work undertaken and how it benefits trees. Climate Change: Hotter summers and increased disease and insect pressures are anticipated which may have significant adverse impacts on trees requiring increased maintenance needs for watering and pest management.
	Plant establishment	Regular watering, structural pruning, and mulching of young trees is critical to establish health and good tree structure thereby reducing future maintenance costs and potential hazards.	
	Mature tree watering	Mature trees generally are not watered during drought conditions and tree loss may result.	
	Hazard mitigation	Trees in urban areas can create potentially hazardous situations. Falling limbs and dead wood are part of a tree's natural cycle. However, trees or limbs that have fallen or are about to fall onto picnic areas, roads, buildings, trails etc require actions to mitigate the potential risk.	Hazard Mitigation: A large percent of crew time is spent on clean up after storms or other tree failure and reducing potential hazards. A shift to increased proactive tree care could reduce the percent of time spent on hazard mitigation.

Strategy	Current Actions	Description	Opportunities & Challenges
		Trees along roadways also have the potential to create hazardous situations by blocking traffic signs, impeding visibility of pedestrians at intersections etc.	
	Preservation & protection	Development and construction projects threaten established trees on City property.	Tree protection procedures and enforcement during crew and contracted development projects could be evaluated for potential improvements.
	Privately-maintained street trees	SDOT maintains 38,000 of the estimated 133,000 street trees. Care for street trees not planted by SDOT is the responsibility of the abutting property owner. This most often means they are not cared for.	Privately-maintained street trees generally receive limited care. Once trees get more than 20' feet tall, the ability of the homeowner to maintain the trees themselves is greatly diminished. SDOT crews must abate hazards created by privately-maintained ROW trees when needed. SDOT estimates that 15% to 20% of crew time is devoted to abating hazards created by privately maintained street trees.
Planting	SDOT	The Bridging the Gap levy is funding planting an average of about 800 street trees per year through 2015. Approximately another 300 trees are planted each year through SDOT's capital program and become part of SDOT's inventory.	Maintenance impacts: Planting additional trees at this scale will increase maintenance resource needs
	Parks	Parks plants about 1,000 trees each year. The number of trees planted depends on the number of capital projects built and budget.	Maintenance impacts: Planting additional trees at this scale will increase maintenance resource needs
	Seattle Center	Seattle Center is an urban campus with a stable tree inventory. Trees occasionally fail due to structural defects, disease, or damage and are replaced.	As the Century 21 master plan is implemented, there will be many opportunities for tree replacement and new planting. Going forward, Seattle Center is committed to planting two trees for every tree removed on new projects.
	Woodland Park Zoo	The Zoo plants trees primarily as part of capital projects. Over the last 20 years the Zoo has planted an average of 235 trees a year.	Maintenance impacts: The Zoo contracts out major tree maintenance. Most maintenance is done in response to hazard assessment and for new tree establishment.
	City Light	City Light provides replacement trees for trees removed during line clearance.	City Light is conducting a system assessment to develop a best in class Integrated Vegetation Management program emphasizing Right Tree in the Right Place concepts.

Strategy	Current Actions	Description	Opportunities & Challenges
Restoration	Green Seattle Partnership	The Green Seattle Partnership between Seattle's residents (including over 80,000 hours of volunteer support last year), the City, in collaboration with Cascade Land Conservancy is restoring 2500 acres of remnant forested land by 2025. A 20-year strategic plan was adopted in 2005 and the program is overseen by an Executive Council. The program has developed best practices in planning, field work, volunteer management and has become a model for other cities in the region. Cascade Land Conservancy now supports Green Cities Partnerships in 5 Puget Sound cities.	Funding: This is a large scale project requiring a significant level of sustained funding. A major funding source, real estate excise taxes, is significantly reduced in 2009/2010. Parks levy funding will make up for much of this shortfall in 2010. Sustaining funding for this program over the long term is challenging. Volunteers: Extensive volunteer support is a vital element of the program. Sustaining and growing the volunteer base is an opportunity and challenge. Additional support for volunteer recruiters and volunteer leads is needed. Coordination between Parks volunteer management staff and GSP could be enhanced. Communication: Articulating the complex multi-year restoration process to stakeholders is challenging. There has been a significant focus on the number of new acres entering restoration which is only one measure of the work. Better measures of the work (e.g. number of acres in different stages of restoration) are needed to help monitor program implementation and communicate with stakeholders. The Partnership is evaluating options.
Land Acquisition/ Surplus	Parks , FFD, SCL, SDOT	The City acquires and sells treed land and land with the potential for urban forest restoration	Many factors are considered when property purchase and sales decisions are made such as cost, opportunity, equitable access to open space etc. How ecosystem value is considered could be evaluated.
Outreach	Seattle reLeaf Campaign Parks, SDOT, SCL, Seattle Center,	Outreach program – Over the last two years outreach has included a website, poster/bus ad campaign, radio ads, tabling, and event sponsorship (e.g. 2009 Plant Amnesty Festival of Trees) and a tree planting and care brochure in 13 languages. Urban Forest outreach occurs in Parks, SDOT, Seattle Center, and SCL through events, brochures, Heritage Tree Program, Environmental Learning Centers etc. ReLeaf	Scope: The scope of the reLeaf outreach program has been limited due to funding constraints. Collaboration with other entities (e.g. non-profits, businesses) could expand the scope and impact. Parks will be seeking new ways to integrate this effort in the Environmental Learning Centers. It is also challenging to bridge the language barriers in a city with such wide cultural diversity.

Strategy	Current Actions	Description	Opportunities & Challenges
		serves as the umbrella to reduce resident confusion over messages and provides a citywide portal for departmental tree information.	
Incentives	Dept' of Neighborhoods Tree Fund	Groups of at least 5 residents work together to request at least 10 street trees that will be provided by the City and planted and cared for by the resident. In 2009, fruit trees for yards (not ROW) were offered to Tree Fund participants as a pilot project. Over 700 trees were planted this fall through the program.	Participation: Trees are primarily for the ROW. The participation requirements and the application process may limit participation. Information: Only two representatives for each group are required to attend the training and provide contact information. There is limited outreach to recipients about proper tree establishment and care after the initial training. Potential Future Hazards: Proper tree establishment and care of privately-maintained trees is inconsistent. Once trees reach a size where it is difficult for the homeowner to maintain, the chances of proper care decreases. When proper tree structure is not established early and ongoing care is not provided, the potential for the tree to become a future ROW hazard requiring mitigation performed by City crews increases.
	Neighborhood Tree Program	A program to provide trees to residents in neighborhoods identified to have low canopy cover, high planting potential, and lower incomes was piloted in 2009. Trees were made available to be planted in yards or the ROW. The City provided the trees, a non-profit recruited participants, assisted with tree selection and managed tree distribution. Residents planted and will care for the trees. Seasonal tree care information will be provided to each recipient for 2 years.	Expanding Program: If funding is available, the goal is to scale up the program. Funding opportunities and an increased role for volunteers are being evaluated.
	Drainage Rate Incentive	Trees help mitigate stormwater. Current drainage rates recognize this benefit in new construction.	Incentives: SPU is exploring opportunities to use drainage rates to provide incentives to plant trees.

Strategy	Current Actions	Description	Opportunities & Challenges
			Stormwater rates: Dense tree coverage is a factor considered when establishing parcel's rate tier.
Regulations	Stormwater and Drainage Control Code	The City's updated code requires use of Green Stormwater Infrastructure (GSI) to the maximum extent possible under certain conditions. Trees are among several GSI options.	All new projects triggering drainage review will be informed about the new stormwater requirements
	Tree Removal Regulations	DPD maintains regulations regarding the removal of trees during and outside of development. Limitations on the number and type of trees that can be removed outside of development were implemented as interim regulations in April 2009.	Tree Protection Update: DPD began the process of updating the Tree Protection Code in 2008 and is anticipating completion of this process in 2010. The update process requires balancing increased tree protection regulations with growth management goals and property rights while not creating unintended disincentives to tree preservation and planting.
	Street Tree Regulations	SDOT has drafted tree regulations to strengthen enforcement and penalties for illegal removal of privately maintained street trees and has added a requirement that commercial tree companies must meet certain arboricultural qualifications	Street Tree Regulation Update: Comment on the draft ordinance will be part of the broader update of permanent tree protection regulations planned for 2010. Currently, trees on private property have a higher level of regulation than do street trees.
	Parks Private Tree Trimming	Parks allows tree trimming for private views in greenbelts. About 4-10 permits are issued per year.	Permits: The cost to administer these permits is high. Interests of private citizens and the policy goals of enhancing the urban forest need to be balanced.

Audit : Management of City Trees

In 2009, the City Auditor reviewed the City's management of trees and highlighted challenges the City faces in implementing the Urban Forest Management Plan. Findings from the audit report released May 15, 2009 include:

- New regulations are critical to preserving tree canopy and additional resources will be necessary for regulations to be effectively enforced
- Substantial and continuous funding is necessary and current funding cannot meet all needs requiring prioritization
- City management of trees is spread across multiple departments with different goals
- Tree selection choices don't always account for goals within and between departments
- Community support is essential to meeting the canopy cover goal as majority of tree preservation and planting potential is on private property
- A citywide tree inventory of city-managed trees is needed to forecast trends, plan maintenance, facilitate budgeting, and provide a basis for planning
- A stable management structure and a single executive level official with authority and accountability are lacking

While some of these issues have been addressed since the audit inquiry process began - including improving the City's management structure, inventorying city-managed street trees, and developing a revised street tree planting list- other challenges remain such as increasing awareness of the value of trees in the community and improving the tree protection regulatory framework. The Auditor highlighted the need for a shorter term strategic plan and the importance of carefully prioritizing actions to maximize urban forestry goals within available resources. This UFMP Implementation Strategy serves to help meet these needs.

Satellite Study

The 2007 UFMP was developed using tree canopy cover data from 2000 LIDAR remote sensing imaging. In order to prioritize actions to maximize canopy cover increase, data on current canopy, recent trends, impacts of development, and planting potential was needed. Therefore, an assessment using high resolution (2'x2' pixels), summer satellite data with advanced data extraction and analysis techniques was conducted. This methodology is now the best practice for canopy cover assessment over large areas and will be used in future assessments which will ensure comparability of data over time. Canopy cover was assessed by land use type for the city as a whole, for the right-of-way (ROW) and for non-ROW property, and was broken down by the city's 53 Community Reporting Areas (CRAs) and 25 Urban Villages.

The satellite study revealed that after decades of tree loss, the trend shifted and canopy cover increased slightly between 2002 and 2007 to 23 percent. Results by land use type are presented in Table 4.

Table 4: Citywide Canopy Cover by Land Use Category

Land Use Category	2002 Canopy Cover	2007 Canopy Cover	Goal Canopy Cover	Estimated # of New Trees Needed
Commercial/ Mixed Use	8.4%	9.7%	15%	33,410
Developed Park or Boulevard	25.9%	25.5%	25%	0
Downtown	4.2%	4.7%	12%	8,220
Major Institution	18.4%	19.4%	20%	560
Manufacturing/ Industrial	3.8%	4.3%	10%	48,780
Multi-Family	16.6%	17.1%	20%	22,970
Parks Natural Area	82.5%	80.4%	80%	0
Single Family	25.2%	25.7%	31% (33%)	192,870
Total	**22.5%**	**22.9%**	**30%**	**306,810**

Highlights of the canopy assessment results include:

- Citywide tree canopy cover in 2007 was about 23%
- Canopy cover citywide is relatively stable with gains balancing losses and a slight overall increase
- Tree cover is increasing more quickly on right-of-way (ROW) than non-ROW property
- Significant canopy loss occurs during redevelopment
- Canopy cover increased in multi-family neighborhoods primarily due to gains in the ROW
- Developed parks and parks natural area canopy cover are above the UFMP goals
- Declines in parks natural areas occurred as expected and extensive restoration work is underway
- We need to double the pace of canopy cover increase to meet the 30% goal by 2037
- Downtown tree cover may be misrepresented due to tall buildings obscuring tree cover. Options for reconciling the satellite data with inventory data are being evaluated

A closer evaluation of recent trends in each land use category reveals that the current pace of tree canopy growth in three land uses- downtown, manufacturing/ industrial areas, and single family residential neighborhoods - is not sufficient to meet the goals by 2037. See Table 5: Tree Canopy Trends. Based on assumptions translating canopy cover percent into numbers of trees, single family areas represent 81% (3,403 trees) of the shortfall of about 4,188 net new trees per year.

The results also provided information about the distribution of tree canopy in Seattle's residential neighborhoods. Single family areas in eight neighborhoods were found to have low (<20 percent) canopy cover; those neighborhoods are Ballard, Beacon Hill, Georgetown, Judkins Park, N. Beacon Hill, Roxhill, W. Seattle Junction, and Whittier Heights. These areas also show sufficient planting potential to meet the goal for single family areas, creating an opportunity to focus tree planting incentives.

Insert SFR CRA canopy cover map

Table 5: Tree Canopy Trends

	UFMP Canopy Goal (estimated total trees)	2007 Canopy	Total additional trees needed to meet goal in 28 years	Total additional trees/ year needed	Total tree increase 03-07	Average trees/yr increase 03-07	Trees per year not happening at status quo	Cost of trees requiring additional incentives	Add'l trees/ acre needed (goal trees/acre)
Downtown	12% (13,572)	4.7%	8,224	294	591	148	**146**	$102,200 ($700/tree)	10.1 (16.6)
Institutional	20% (19,552)	19.4%	557	20	1,008	252	**-**	-	.5 (17.8)
Manufacturing Industrial	10% (85,882)	4.3%	48,777	1,742	4,411	1,103	**639**	$319,500 ($500/tree)	8.0 (13.9)
Multi-Family	20% (156,635)	17.1%	22,971	820	3,855	964	**-**	-	4.1 (27.7)
Commercial	15% (94,103)	9.7%	33,415	1,193	7,779	1,945	**-**	-	7.4 (20.8)
Single Family	33% (876,567)	25.7%	192,869	6,888	13,941	3,485	**3,403**	$680,600 ($200/tree)	6.4 (29.3)
Parks Developed	25% (52,283)	25.5%			(974)				(22.2)
Citywide	30% (1,298,594)	22.9%	306,813	10,957	31,585	7,897	**4,188 (3,060[1])**	$1,102,300	6.2 (24)
ROW	24% (225,265)	17.6%	81,831	2,922	12,460	3,115	**-**	-	5.6
Parks Natural Area[2]	80%	80.4%			(20,371)				

[1] If we don't use the projected trees over goal in other land uses as an offset against citywide tree planting needs and still strive to meet the land use goals in Downtown, Manufacturing/ Industrial and Single Family land categories, 4,188 additional trees are needed. If we do take the offset for projected tree planting which will exceed the goals in some land uses, 3,060 total additional trees will need to be planted.

[2]Tree planting numbers do not effectively capture the Parks Natural Areas restoration process and are therefore presented separately. The restoration process requires extensive invasive plant removal and tree and understory planting over the course of several years and is being accomplished through the Green Seattle Partnership. A detailed 20 year strategy was created for this work in 2004.

Priorities

The UFMP identified a comprehensive set of actions to be implemented over 30 years to achieve the 30 percent canopy cover goal. The recent canopy cover study results, available resources, and current opportunities and challenges must be considered in order to effectively prioritize actions over the short term. We have created this document setting out priorities for the next five years to serve as an Implementation Strategy for the UFMP. Our priorities are based on these five fundamental concepts:

1. The urban forest occurs primarily on private property and therefore is sustainable when the community values trees and is engaged in planning, preserving, planting, and caring for them
2. Tree maintenance is critical for tree health, safety, and longevity in urban environments
3. Restored forested lands require ongoing maintenance to prevent future decline
4. Partnerships with, funding, and in-kind support from diverse organizations supplements City resources and broadens community support while expanding the impact of City efforts
5. Other green infrastructure options such as green roofs, community gardens, bioswales/ rain gardens, shrubs and plants complement the values trees provide and may be more appropriate in some urban settings

With these principles in mind and after considering the assessment of current programs and opportunities and challenges, the general priorities for the next five years are:

- Improve stewardship of City-managed trees
- Continue restoration on City-owned natural forest stands where restoration has already begun, add acres as resources allow through the Green Seattle Partnership
- Improve regulations to encourage tree preservation and protection on private property and in the ROW
- Pursue grants and public /private partnerships to coordinate outreach efforts to increase direct action and support in the community for tree preservation, planting, and care
- Provide additional incentives for tree planting focusing on single family residential zones especially in neighborhoods with lower tree canopy cover

Informed by these priorities and consideration of the opportunities and challenges, actions to be undertaken over the next five years focus on expanding community outreach to promote the benefits of trees and increase awareness of tree care and planting needs, increasing incentives for tree planting in neighborhoods, improving City management tools, enhancing the tree protection regulatory framework, planting trees on City property and improving stewardship of trees on City property. Within these priorities we have looked for opportunities to maximize the impact of our existing resources by seeking grants and fostering community partnerships. Action highlights for the next five years and the department(s) with lead responsibility include:

2010 Priority Actions

Outreach & Engagement

- Meet with non-profit partners to develop a strategy for **collaborative outreach** to increase impact of City efforts (OSE)
- Develop K-12 **urban forest curriculum** with Seattle School District (Parks, SPU)
- Engage 90,000 hours of **volunteer support** in forested land restoration programs

Neighborhood Planting Incentives

- Continue **DON Tree Fund** community tree planting program
- Scale up the **Neighborhood Tree Program** that OSE piloted in 2009 to expand the number of trees planted and tree care outreach and to engage community volunteers
- Identify **new incentive opportunities** including evaluating options through the drainage fund

Management Tools

- Evaluate **tree inventory sampling** options and apply for grants. Conduct field sampling if grant funding is available (OSE, Parks, SDOT)
- Identify citywide **policy issues** that may need to be reviewed and updated or adopted at a Citywide versus department level (views, hazard trees etc.) (IDT)
- Develop improved citywide **tree care metrics** (SDOT, Parks, OSE, IDT)
- **Assess vegetation management** for electrical line safety and reliability and improve tree management as indicated (SCL)

Regulations

- Update **street tree regulation** to enhance protection of ROW trees (SDOT)
- Adopt an improved **permanent tree protection regulatory** framework (DPD)
- Expand **Green Factor** in Multi-Family zones (DPD)

2011 Priority Actions

Outreach & Engagement

- Assist with **teacher training** in new curriculum (Parks)
- Partner with non-profits to implement **outreach** projects (OSE, IDT)
- Pilot test **neighborhood tree surveys** to build community and tree benefits awareness (DON, OSE)
- Engage 95,000 hours of **volunteer support** in forested land restoration programs

Neighborhood Planting Incentives

- Enhance **incentive programs** based on lessons learned
- Implement **new incentives** as indicated by the evaluation in 2010 (tbd)

Management Tools

- Complete citywide sampling **inventory field work & data analysis** if funding was available to initiate the field work in 2010
- Improve **City specifications** for tree protection and planting (SPU, IDT)

Regulations

- **Review effectiveness** of updated tree protection regulations in meeting goals or creating unintended consequences (DPD, SDOT)

City Tree Planting, Maintenance, and Restoration 2010/2011

- Improve **tree maintenance** and stewardship to promote health and longevity of City trees (Parks, SDOT)
- **Plant 1,500 trees** per year on City property and along the right-of-way (Parks, SDOT, Seattle Center)
- Initiate **restoration** on 100 acres of forested land and continue work on acres already in the restoration process (Parks, SPU, OSE)

2012- 2014 Action Priorities

Outreach & Engagement

- **Collaborate with schools** on tree planting/education project (OSE, Parks)
- Continue to implement collaborative **outreach** projects with community partners (OSE)
- Pursue **earned media** to promote the value of trees and community engagement opportunities (OSE)
- Engage 100,000 hours of **volunteer support** in forested land restoration programs (Parks)

Neighborhood Planting Incentives

- Refine **incentive programs** and increase community building elements of programs based on lessons learned in 2010/2011 (OSE, DON, tbd)
- Pursue additional **funding sources** through grants and partnerships for incentive programs (OSE, IDT)

Management Tools

- Continue to monitor performance against targets and conduct new satellite **canopy study** and inventory sampling to assess progress against goals (IDT, OSE)
- Draft updated **5-year Implementation Strategy** (OSE, IDT)
- Develop **management strategies** by land use type (IDT)

City Tree Planting, Maintenance, and Restoration 2012-2014

- Improve **tree maintenance** and stewardship to promote health and longevity of City trees (Parks, SDOT)
- **Plant 1,500 trees** on City property and along the right-of-way (Parks, SDOT, Seattle Center)
- Initiate **restoration** on 160 acres of forested land and continue work on acres already in the restoration process (Parks, SPU, OSE)